

# Technology Trends & Analysis Insights

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# OUTLINE

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- Executive Summary
- Introduction
- Methodology
- Results
  - Visualization – Charts
  - Dashboard
- Discussion
  - Findings & Implications
- Conclusion
- Appendix

# EXECUTIVE SUMMARY

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- Trends in programming languages and databases
- Demographics survey
- Technological gap in countries
- Gender gap in jobs



# INTRODUCTION

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## **Purpose:**

To analyze technology trends and job market demand

## **Target Audience:**

- Technology decision-makers
- Software developers
- Aspiring data analysts

## **Value of the Report:**

- Helps align skills with industry demand
- Supports data-driven career and business decisions



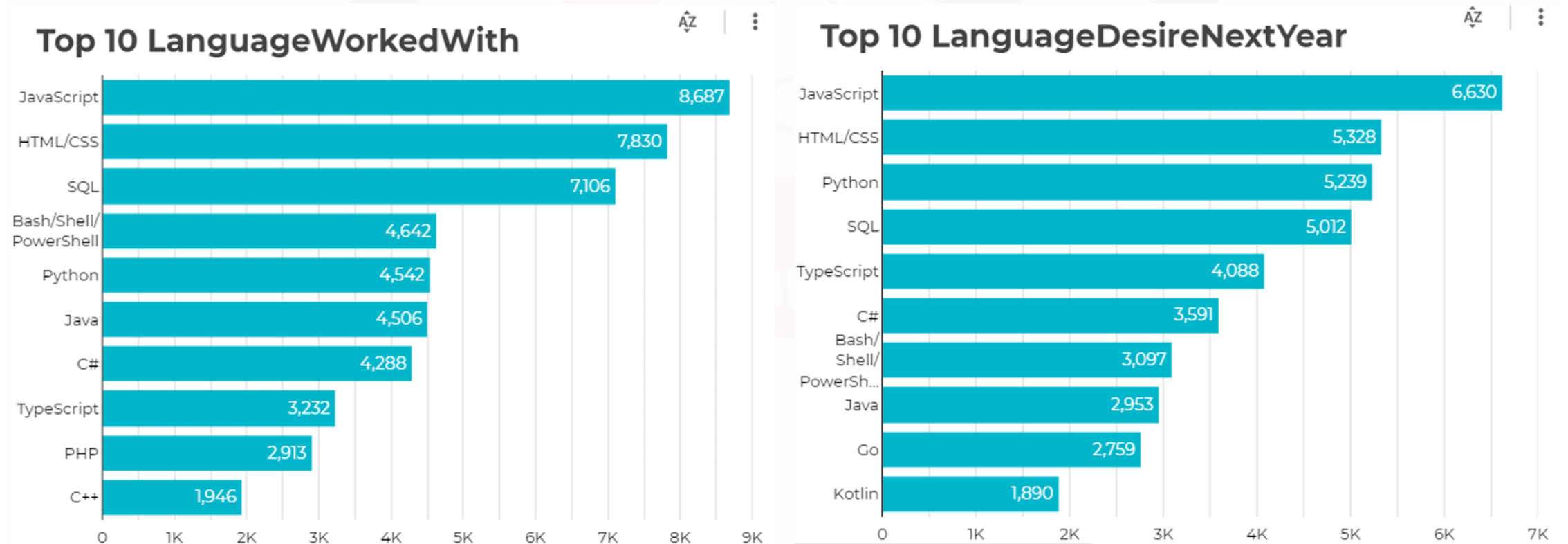
# METHODOLOGY

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- **Data Collection Sources:**
  - Stack Overflow 2019 Survey
  - GitHub Job Postings dataset
  - Programming Languages Annual Salary
- **Data Wrangling:**
  - Cleaning missing values
  - Selecting relevant variables
- **Data Visualization**
- **Presentation**

# PROGRAMMING LANGUAGE TRENDS



# PROGRAMMING LANGUAGE TRENDS - FINDINGS & IMPLICATIONS

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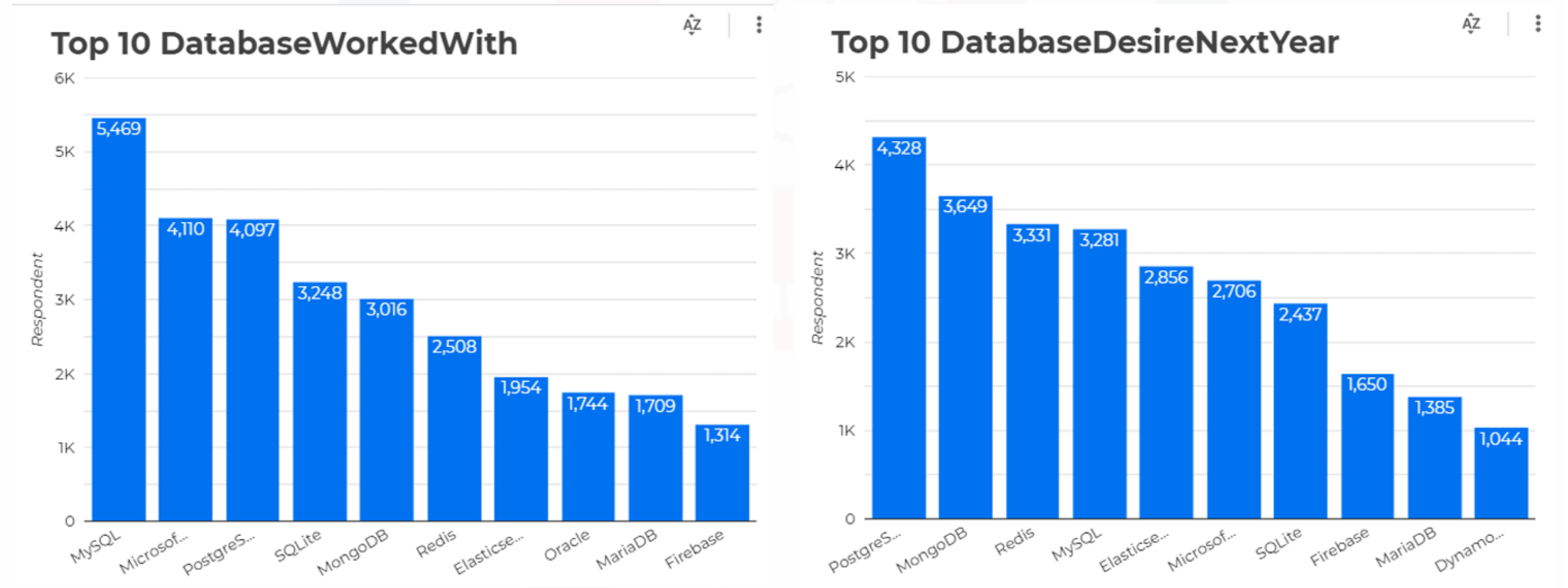
## Findings

- JavaScript, HTML/CSS, and SQL consistently appear at the top of both charts
- Python becoming popular next year
- Java and C++ show a decline, while TypeScript, Go, and Kotlin appear more prominently

## Implications

- Core web development and data querying skills remain essential
- With ML, AI, and Automation in rising demand, Python is the best choice
- Modern languages will dominate traditional popular languages

# DATABASE TRENDS





# DATABASE TRENDS - FINDINGS & IMPLICATIONS

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## Findings

- MySQL dominates current usage but loses future momentum
- PostgreSQL shows strong and increasing future appeal
- MongoDB and Redis gain future interest
- Traditional databases decline in future demand

## Implications

- Gradually shift away from MySQL
- PostgreSQL skills become increasingly valuable
- NoSQL and in-memory databases become more important
- Moving toward modern and scalable architectures



# DASHBOARD

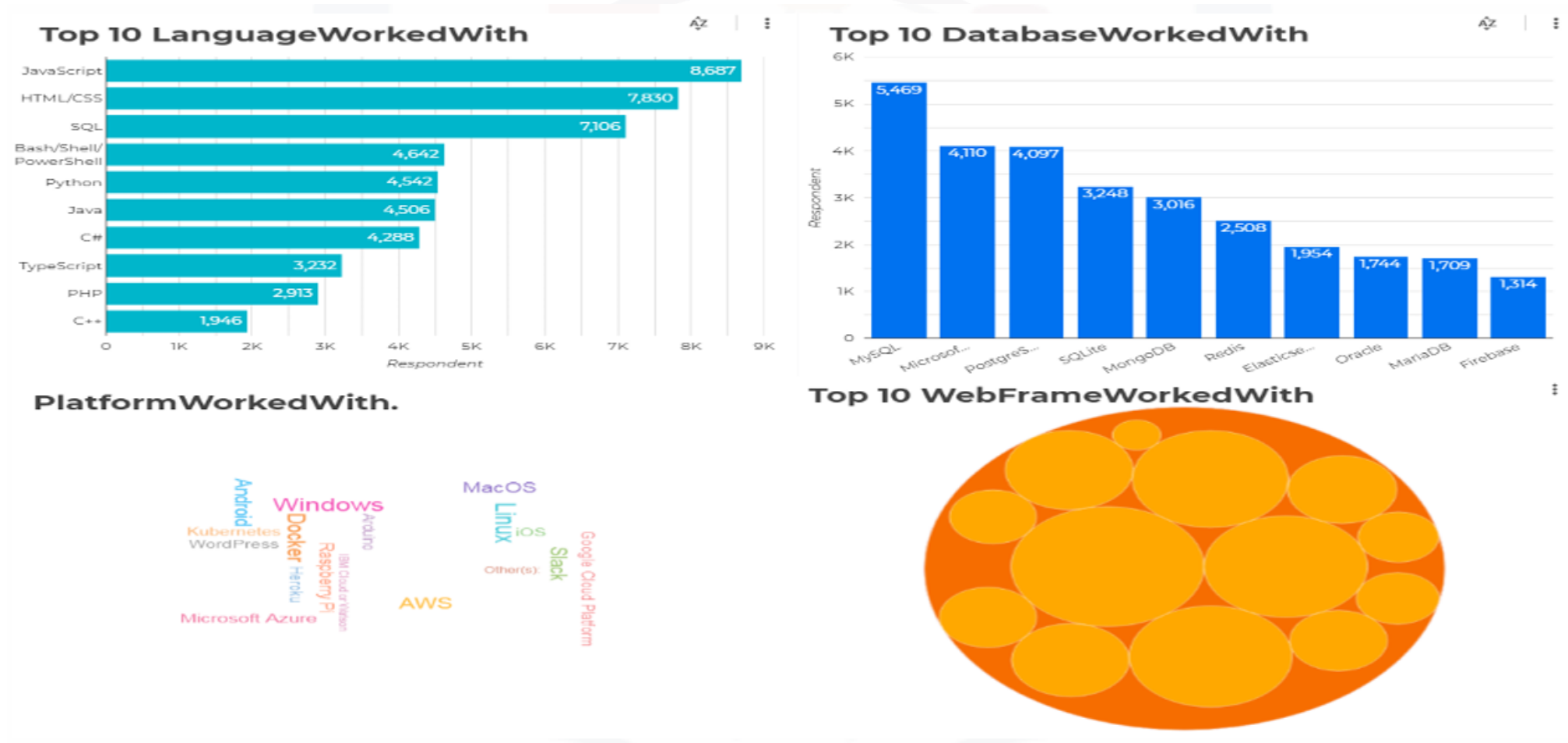
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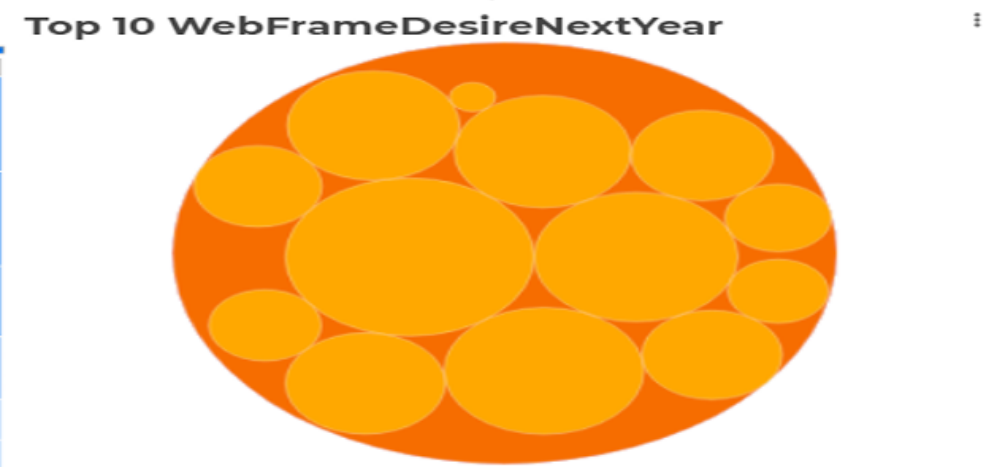
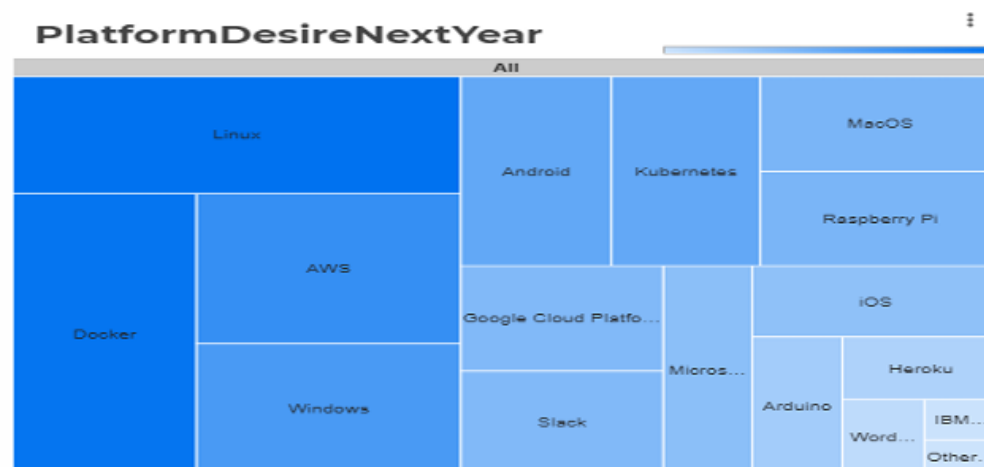
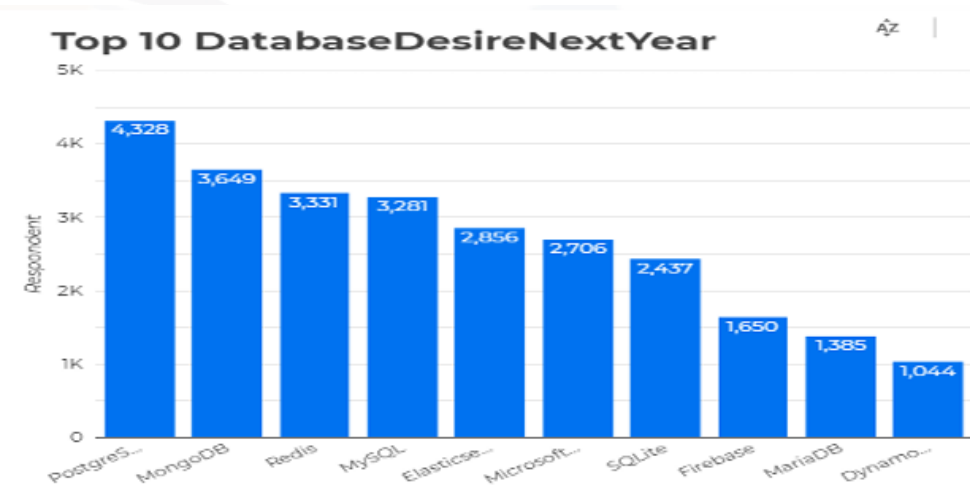
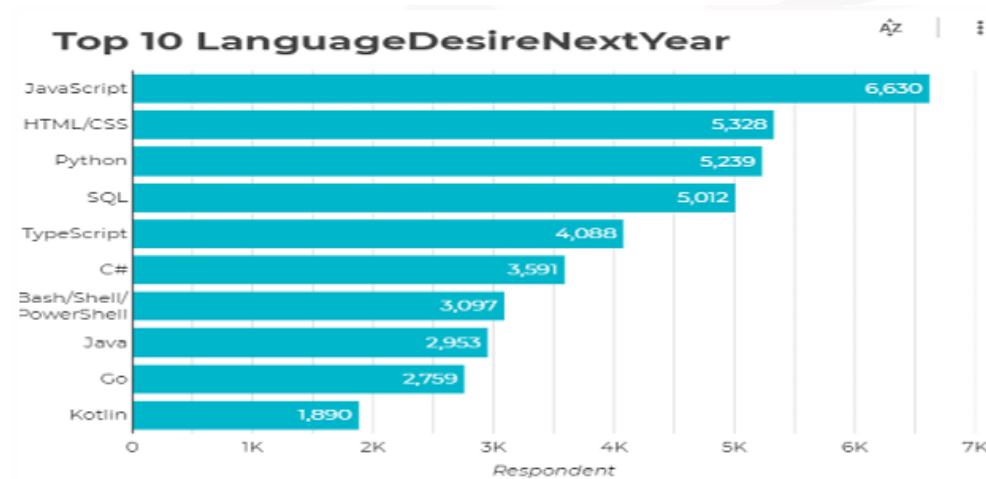
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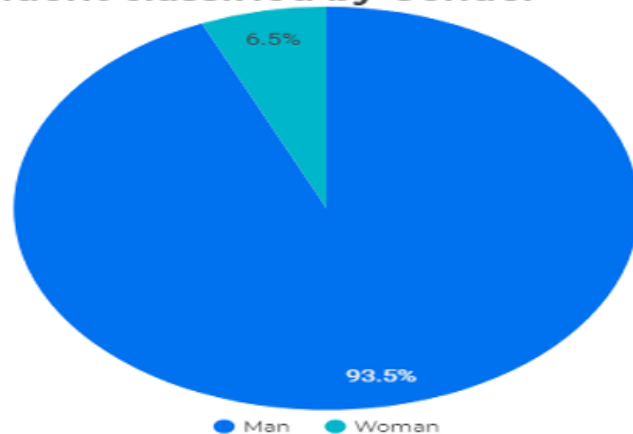


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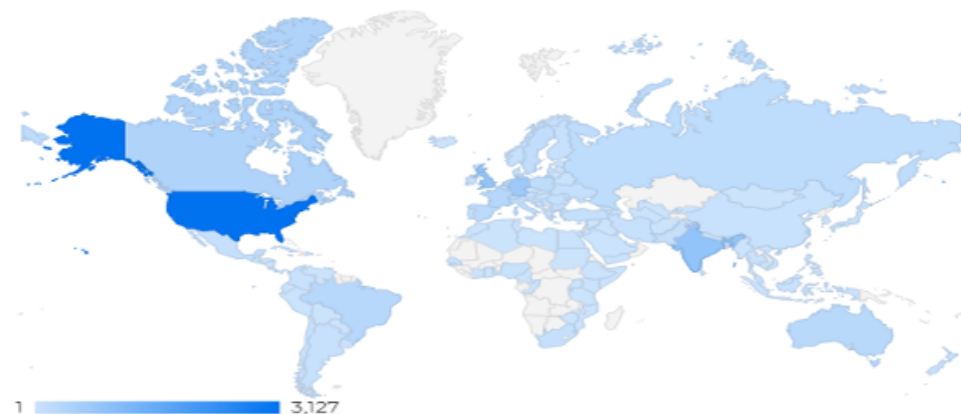


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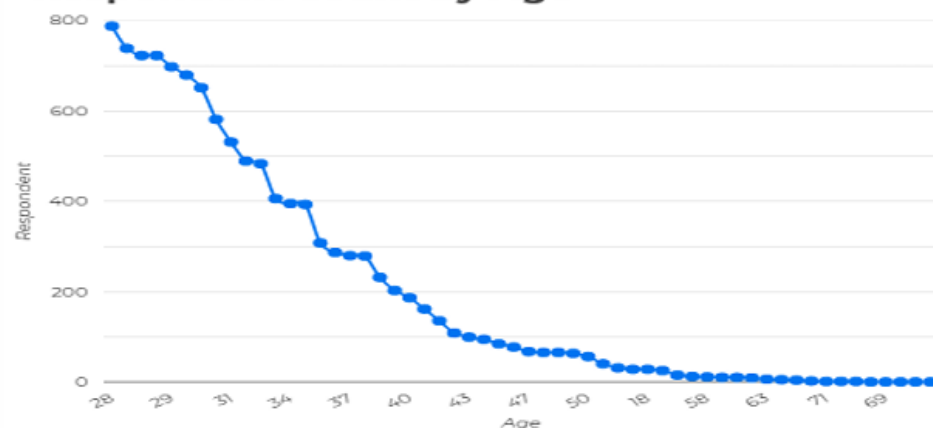
Respondent classified by Gender



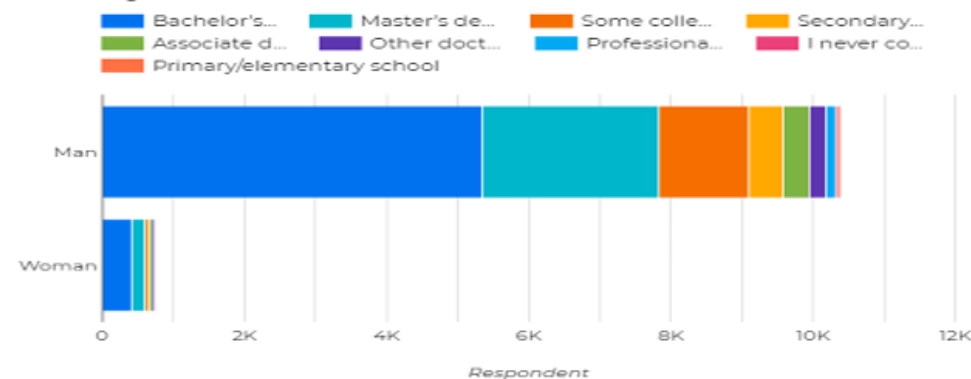
Respondent Count for Countries.



Respondent Count by Age



Respondent Count by Gender, classified by Formal Education Level



# DISCUSSION

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- Technology become more adaptable toward the future
- Gender participation in technology field
- Dividing technology gaps between countries
- Eliminate age and education discrimination in employment

# OVERALL FINDINGS & IMPLICATIONS

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## Findings

- Fast changing technology usage every year
- Gender gap in technology jobs
- Platform like Docker and AWS are growing

## Implications

- Companies need to be flexible and adjust to rapid changes
- Impact of job hirings
- Shift to faster app deployments and cloud services in future

# CONCLUSION

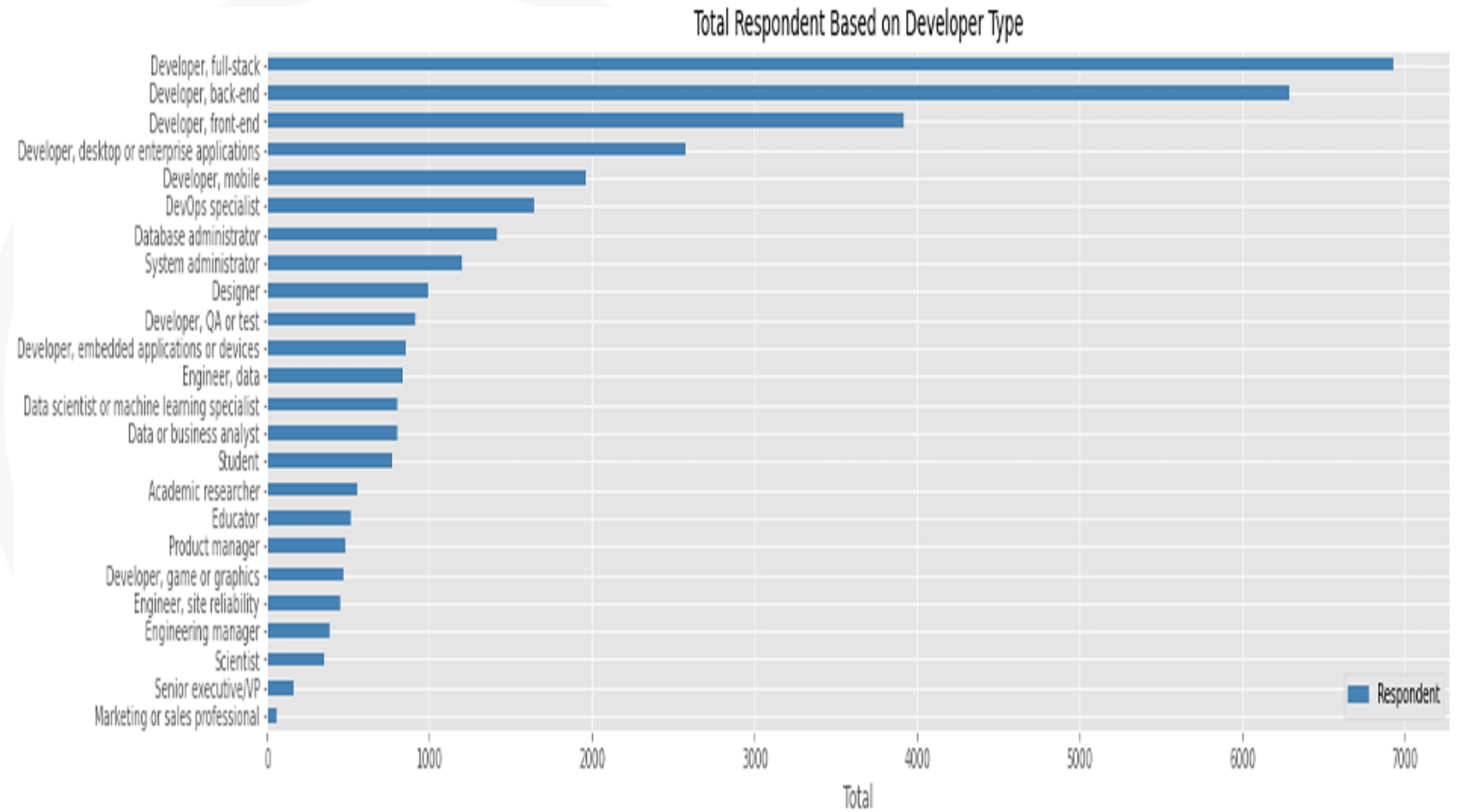
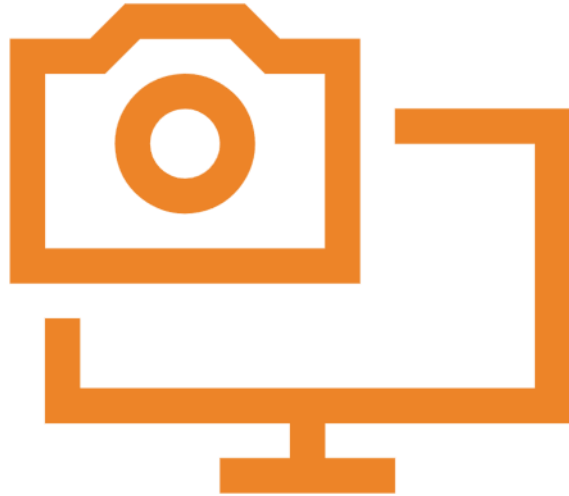
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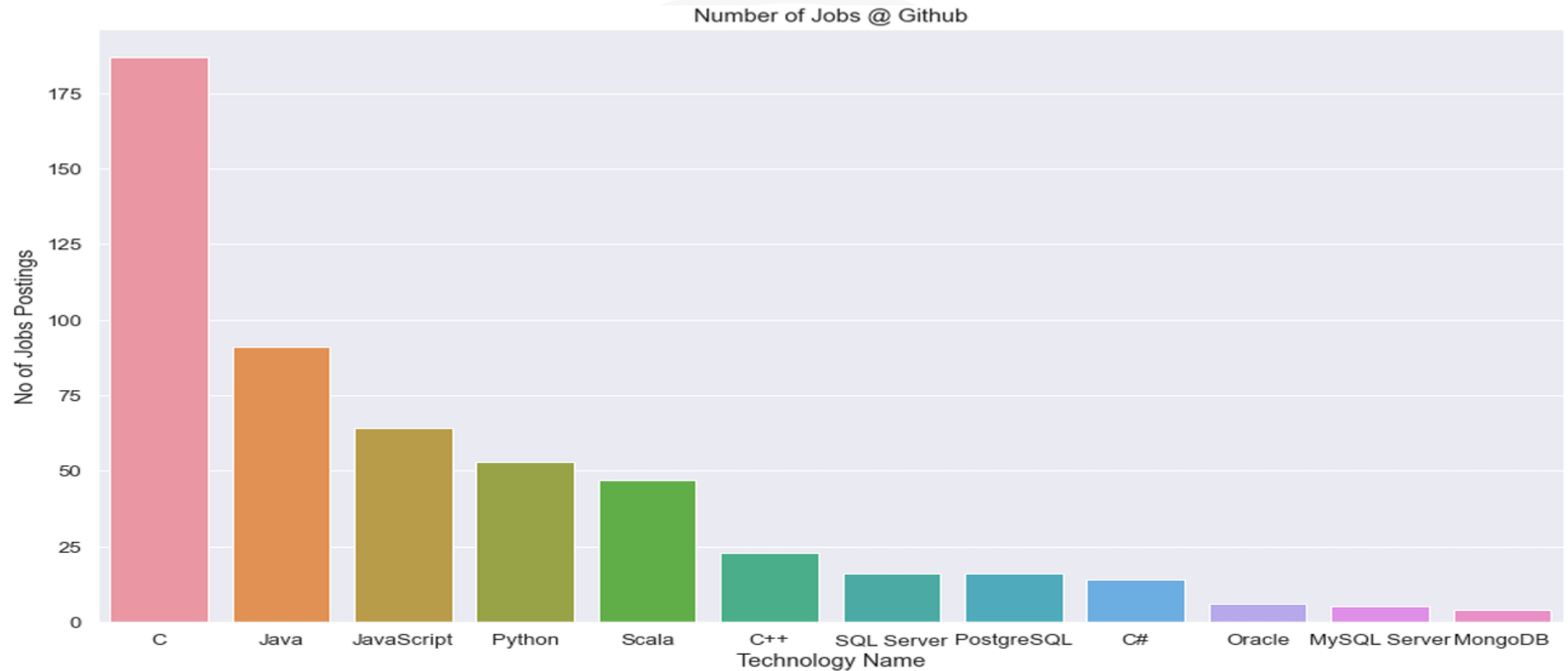
- Technology Trends for current and next year
- Programming Languages, Database, and Platform overview
- Demographics overview
- Actions to be taken
- In future, incorporate Machine Learning to predict trends and salaries



# APPENDIX



# JOB POSTINGS



# POPULAR LANGUAGES

